

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

FIRST NAMED INVENTOR : James A. AMOS                      **Confirmation No.: 9008**  
FOR : HYBRID WIRELESS IP PHONE SYSTEM AND  
METHOD FOR USING THE SAME  
APPLICATION NO. : 10/600,084  
FILING DATE : June 20, 2003  
EXAMINER : Zhiyu  
ART UNIT : 2618  
CUSTOMER NO. : 23380

**RESPONSE TO NOTIFICATION**  
**OF NON-COMPLIANT APPEAL BRIEF**

**Mail Stop Appeal Briefs - Patent**  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Sir:

The Final Office Action in the above-identified application was dated October 1, 2008. Applicant filed a Notice of Appeal on January 2, 2009 and an Appeal Brief on February 27, 2009.

This paper is responsive to the Notification of Non-Compliant Appeal Brief mailed on April 24, 2009 in connection with the above-identified patent application on Appeal.

Although applicant does not concede that the Brief previously filed does not contain a concise explanation of the subject matter defined in each of the independent claims or in each of claims 2 and 3 cited by the Examiner, a revised Section V - Summary of the Claimed Subject Matter under 37 CFR 41.37(c)(1)(v) is provided herein.

As noted by the Examiner at the Patent Appeals Center, a new Appeal Brief is not necessary and accordingly, only the revised Summary of the Claimed Subject Matter section is being provided herein.

Favorable consideration of the instant Appeal Brief is respectfully requested.

### **SUMMARY OF CLAIMED SUBJECT MATTER**

The embodiments of the present application pertain generally to wireless communication devices and, more particularly, to a device, method, and system of communication incorporating wireless Voice over Internet Protocol.

As described in the Abstract, a system, device, and method are provided for sending and receiving Voice-over-Internet-Protocol over a wireless computer network utilizing a hybrid wireless Voice-over-Internet-Protocol telephone. The embodiments of the invention utilize a phone controller, a wireless handset, a base station and at least one access point. The wireless handset is equipped with both a wireless personal area network transceiver and a wireless local area network transceiver. The base station is equipped with a wireless personal area network transceiver and a network interface card. Voice-over-Internet-Protocol packets are routed to a phone controller which forwards the packets to either an access point for transmission to the wireless handset over the wireless local area network, to a base station for transmission to the wireless handset over the personal area network, or to an associated server for transmission out of the local area network such as, for example, for transmission to the Internet.

In more specific terms as related to the embodiments illustrated and without limitation, the application is directed to a wireless Voice over Internet Protocol (VoIP) wireless mobile telephone. The wireless mobile telephone is equipped with a Personal Area Network ("PAN" or "Bluetooth") transceiver and a wireless local area network ("WLAN" or "802.11") transceiver. Because the Bluetooth transceiver uses less power, whenever the mobile phone is near its base, which uses a Bluetooth connection, the mobile phone uses the Bluetooth transceiver. When the mobile phone moves beyond the range of the Bluetooth connection, it turns on the 802.11 transceiver and connects with an 802.11 access point, and sends a message over the network to a phone controller to route packets for the mobile phone via the 802.11 network. When the wireless mobile telephone is relocated back within range of the base, a Bluetooth connection is established, whereupon the mobile phone sends a message to the phone controller via the Bluetooth connection to route traffic for the wireless mobile telephone through the base. Because both the Bluetooth and 802.11 connections support VoIP, the wireless mobile telephone initiates the transfer between the base and the 802.11 network.

In one embodiment of the claimed invention (p8, ln 1-16), such as set out in independent claim 1, a wireless voice over Internet Protocol telephone, comprises a wireless handset 100, a wireless local area network transceiver 102, 104, and a selecting device 106. The wireless handset that comprises a wireless personal area network transceiver 104 configured to communicate with a wireless personal area network 310. The wireless local area network transceiver 102 is configured to communicate with a wireless local area network. The selecting device 106 is configured for selecting between the wireless personal area network transceiver 104 and the wireless local area network transceiver 102.

In accordance with this embodiment (p11, ln 20- p12, ln 15), the wireless handset 100 is in voice communication with a telephone controller 302, and the telephone controller 302 is configured to communicate with a base station 200 coupled to the wireless personal area network 310 and an access point 304 coupled to the wireless local area network.

Further in accordance with this embodiment, the selecting device 106 selects the wireless personal area network transceiver 104 for routing the voice communication through the wireless personal area network 310 when the wireless personal area network transceiver 104 detects a wireless personal area network connection, otherwise the selecting device selects the wireless local area network transceiver 102.

Still further in accordance with this embodiment, the selecting device 106 is configured to send a signal to the telephone controller 302 via the wireless local area network transceiver to route the voice communication for the wireless handset 100 through the wireless local area network responsive to the wireless personal area network transceiver 104 being unable to detect a wireless personal area network connection 314.

Yet still further in accordance with this embodiment, the selecting device 106 is configured to send a signal to the telephone controller 302 via the personal area network transceiver 104 to route the voice communication for the wireless handset 100 through the wireless personal area network 310 responsive to reestablishing a connection with the wireless personal area network 310.

In another embodiment of the claimed invention, such as set out in dependent claim 2, the base station 200 of the wireless voice over Internet Protocol telephone further comprises a

wireless personal area network transceiver 202 (p8, ln 20) for communicating with the wireless personal area network transceiver 104 of the wireless handset (p12, ln 2-4).

In another embodiment of the claimed invention, such as set out in dependent claim 3, the base station 200 of the wireless voice over Internet Protocol telephone further comprises a network interface card 210 (p8, ln 21), wherein the base station 200 notifies a wireless local area network when a wireless personal area network signal from the wireless handset 100 is not detected (p8, ln 8-10).

In another embodiment of the claimed invention, such as set out in dependent claim 4, the wireless personal area network transceiver 202 of the base station 200 of the wireless voice over Internet Protocol telephone is a Bluetooth transceiver Fig. 2 (p13, ln 9-10) and the wireless personal area network transceiver of the wireless handset is a Bluetooth transceiver Fig. 1 (p11, ln 22-23).

In another embodiment of the claimed invention, such as set out in dependent claim 5, the wireless personal area network transceiver 202 of the base station 200 of the wireless voice over Internet Protocol telephone is an infrared transceiver and the wireless personal area network transceiver of the wireless handset is an infrared transceiver (p11, ln 15).

In another embodiment of the claimed invention, such as set out in dependent claim 6, the controller 302 of the wireless voice over Internet Protocol telephone is a phone controller (p15, ln 4) that is communicatively coupled to at least one access point 304 over a local area network 306, and to the base station 200 (p15, ln9-13).

In another embodiment of the claimed invention, such as set out in dependent claim 7, the wireless local area network transceiver 102, 104 of the wireless voice over Internet Protocol telephone 100 is an 802.11x transceiver (p11, ln 23).

In another embodiment of the claimed invention, such as set out in dependent claim 8, the wireless personal area network transceiver 102, 104 of the wireless voice over Internet Protocol telephone 100 is an infrared transceiver (p11, ln 15).

In another embodiment of the claimed invention, such as set out in dependent claim 9, the wireless personal area network transceiver 102, 104 of the wireless voice over Internet Protocol telephone 100 is a Bluetooth transceiver (p11, ln 23).

In yet a further embodiment of the claimed invention (p9, ln 4-17), such as set out in independent claim 14, a method Fig. 5 for a wireless handset to send and receive voice over Internet Protocol using a wireless voice over Internet Protocol telephone is provided. The method comprises establishing 504 a wireless voice communication employing voice over Internet Protocol packets with a telephone controller through a base station via a wireless personal area network transceiver (p 16, ln 19-22).

The method further comprises determining 508 when the wireless handset is out of range of the base station (p 17, ln 1-2) and (p 17, ln 12-13).

The method still further comprises activating 518 a wireless local area network transceiver by the wireless handset responsive to determining the wireless handset is out of range of the base station (p17, ln 16-17).

The method yet further comprises sending 520 a first message via the local area network transceiver notifying the telephone controller to send subsequent voice over Internet Protocol packets for the voice communication to the wireless handset via a wireless local area network in data communication with the wireless local area network transceiver responsive to determining the wireless handset is out of range of the base station (p17, ln 17-19).

The method still yet further comprises sending a second message 510 via the wireless personal area network transceiver notifying the telephone controller to send subsequent voice over Internet Protocol packets for the voice communication to the wireless handset via the base station responsive to determining the wireless handset has moved within range of the base station (p15, ln 15-20) and (p17, ln 2-4).

In another embodiment of the claimed invention, such as set out in dependent claim 15, the method for a wireless handset to send and receive voice over Internet Protocol includes the wireless local area network transceiver being at a remote location (p9, ln 10) and communicatively coupled (p9, ln 10) to the base station.

In another embodiment of the claimed invention, such as set out in dependent claim 16, the method for a wireless handset to send and receive voice over Internet Protocol includes establishing a communications channel 314 between a base station 200 and a wireless handset 100 using the wireless personal area network transceiver 104, 202 (p9, ln 10-12) and (p 15, ln 13-15).

In another embodiment of the claimed invention, such as set out in dependent claim 17, the method for a wireless handset to send and receive voice over Internet Protocol includes the wireless personal area network transceiver being a Bluetooth transceiver (p11, ln 23) and (p17, ln 10).

In another embodiment of the claimed invention, such as set out in dependent claim 18, the method for a wireless handset to send and receive voice over Internet Protocol further comprises authenticating 518 (p 4, ln 16) (p17, ln 16-17) (p18, ln 13-15) the wireless handset by the base station.

In another embodiment of the claimed invention, such as set out in dependent claim 19, the method for a wireless handset to send and receive voice over Internet Protocol includes the wireless local area network transceiver being an 802.11x transceiver (p17, ln 16-17).

In yet a further embodiment of the claimed invention (p8, ln 17 – p9, 13), such as set out in independent claim 39, a system is provided comprising a network, a telephone controller 302 coupled to the network 306, 308, 318 , a wireless local area network access point 304 coupled to the network and configured to communicate with the telephone controller via the network, a wireless handset 100, and a base station 200 coupled to the network and configured to the communicate with the telephone controller 302 via the network, the base station is further configured to wirelessly communicate 314 with the wireless handset.

The wireless handset 100 of this embodiment is configured to wirelessly communicate with the base station using a first protocol (p7, ln 18-20) and (p8, ln 12-14) and to wirelessly communicate with the wireless local area access point using a second protocol (p8, ln 14-16).

The wireless handset 100 of this embodiment is further configured to communicate with the base station 200 when the wireless handset detects the base station 200 (p16, ln 16-18); otherwise the wireless handset communicates with the wireless local area network access point 304 (p16, ln 14-15).

The wireless handset 100 of this embodiment is further configured to transmit a first message for the telephone controller 302 that is sent via the wireless local area network access point to instruct the telephone controller to direct communications for the wireless handset through the wireless local area network access point 304 responsive to the wireless handset being unable to detect the base station (p17, ln 12-19).

The wireless handset 100 of this embodiment is further configured to transmit a second message for the telephone controller 302 that is sent via the base station to instruct the telephone controller to direct communications for the wireless handset through the base station 200 responsive to detecting the base station (p17, ln 17-18).

In another embodiment of the claimed invention, such as set out in dependent claim 40, the wireless handset of the system communicates Voice over Internet Protocol compatible packets with the telephone controller (p15, ln 11-13).

In another embodiment of the claimed invention, such as set out in dependent claim 41, the base station 200 of the system communicates with the wireless handset using a Bluetooth compatible protocol (p15, ln 13-15).

In another embodiment of the claimed invention, such as set out in dependent claim 42, the wireless local area access point 304 of the system communicates with the wireless handset using an 802.11 compatible protocol (p18, ln 10-13).

In another embodiment of the claimed invention, such as set out in dependent claim 43, the telephone controller 302 of the system communicates with the base station 200 using an Internet Protocol compatible protocol and the telephone controller 302 of the system communicates with the wireless local area network access point 304 using an Internet Protocol compatible protocol (p7, ln 20-23).

### Conclusion

Applicant respectfully submits that the Appeal Brief including the revised Summary of the Claimed Subject Matter section presented herein is in proper form under 37 CFR 41.37.

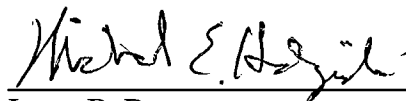
Also, for the reasons previously presented in the Appeal Brief filed on February 27, 2009, applicant respectfully submits that the claims as presently standing are novel, patentably distinct, and unobvious over the cited art of record and that the claims are in condition for allowance thereover.

Allowance of all claims and a Notice of Allowance are earnestly solicited.

If there are any fees necessitated by the foregoing communication, the Commissioner is hereby authorized to charge such fees to our Deposit Account No. 50-0902, referencing our Docket No. 72255/30267.

Date: 29 APR 09

Respectfully submitted,



Larry B. Donovan  
Registration No. 47,230  
Michael E. Hudzinski  
Registration No. 34,185  
TUCKER ELLIS & WEST LLP  
1150 Huntington Bldg.  
925 Euclid Ave.  
Cleveland, Ohio 44115-1414  
**Customer No.: 23380**  
Tel.: (216) 696-4885  
Fax: (216) 592-5009